National Low Emission Vehicle Program, which opt-out has gone into effect under the provisions of §86.1707. All provisions of this subpart are applicable to vehicles certified pursuant to subpart R of this part, except as specifically noted in subpart R of this part.

(d) References in this subpart to engine families and emission control systems shall be deemed to apply to durability groups and test groups as applicable for manufacturers certifying new light-duty vehicles, light-duty trucks, and heavy-duty vehicles under the provisions of subpart S of this part.

(e) References in this subpart to light-duty vehicles or light-duty trucks shall be deemed to apply to light-duty vehicles, light-duty trucks, or heavy-duty vehicles and engines as applicable for manufacturers certifying new light-duty vehicles, light-duty trucks, and heavy-duty vehicles and engines under the provisions of subpart S of this part.

[42 FR 32954, June 28, 1977, as amended at 59 FR 16295, Apr. 6, 1994; 59 FR 48504, Sept. 21, 1994; 61 FR 54890, Oct. 22, 1996; 62 FR 31234, June 6, 1997; 63 FR 965, Jan. 7, 1998; 64 FR 23921, May 4, 1999; 65 FR 59956, Oct. 6, 2000]

§86.102 Definitions.

The definitions in subpart A apply to this subpart.

[45 FR 14508, Mar. 5, 1980]

§86.103 Abbreviations.

The abbreviations in subpart A apply to this subpart.

[45 FR 14508, Mar. 5, 1980]

§86.104 Section numbering; construction.

(a) The model year of initial applicability is indicated by the section number. The two digits following the hyphen designate the first model year for which a section is effective. A section remains effective until superseded.

Example. Section 86.111–78 applies to the 1978 and subsequent model years until superseded. If a §86.111–81 is promulgated it would take effect beginning with the 1981 model year; §86.111–78 would apply to model years 1978 through 1980.

(b) A section reference without a model year suffix refers to the section applicable for the appropriate model year.

(c) Unless indicated otherwise, all provisions in this subpart apply to petroleum-fueled, natural gas-fueled, liquefied petroleum gas-fueled and methanol-fueled vehicles.

[42 FR 32954, June 28, 1977. Redesignated at 45 FR 14508, Mar. 5, 1980, as amended at 54 FR 14499, Apr. 11, 1989; 59 FR 48504, Sept. 21, 1994]

§86.105 Introduction; structure of subpart.

(a) This subpart describes the equipment required and the procedures to follow in order to perform gaseous exhaust, particulate, and evaporative emission tests on light-duty vehicles and light-duty trucks. Subpart A of this part sets forth testing requirements and test intervals necessary to comply with EPA certification procedures. Not all emission measurement techniques described in this subpart will be necessary for all vehicles. Subpart A of this part defines the conditions under which vehicles may be exempted from measuring methane and/or waived from measuring particulate matter.

(b) Three topics are addressed in this subpart. Sections 86.106 through 86.115 set forth specifications and equipment requirements; §§86.116 through 86.126 discuss calibration methods and frequency; test procedures and data requirements are listed in §§86.127 through 86.157.

[56 FR 25760, June 5, 1991, as amended at 59 FR 16295, Apr. 6, 1994; 59 FR 48504, Sept. 21, 1994]

§86.106–00 Equipment required; overview.

Section 86.106–00 includes text that specifies requirements that differ from §86.106–96. Where a paragraph in §86.106–96 is identical and applicable to §86.106–00, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see §86.106–96.''

(a) introductory text through (a)(2) [Reserved]. For guidance see §86.106–96.

(a)(3) Fuel, analytical gas, and driving schedule specifications. Fuel specifications for exhaust and evaporative emissions testing and for mileage accumulation for petroleum-fueled and methanol-fueled vehicles are specified

in §86.113. Analytical gases are specified in §86.114. The EPA Urban Dynamometer Driving Schedule (UDDS), US06, and SC03 driving schedules, for use in exhaust emission tests, and the New York City Cycle (NYCC), for use with the UDDS in running loss tests, are specified in §§86.115, 86.130, 86.159, 86.160, and appendix I to this part.

(b) [Reserved]

[61 FR 54890, Oct. 22, 1996]

§ 86.106–96 Equipment required; overview.

(a) This subpart contains procedures for exhaust emission tests on petroleum-fueled, natural gas-fueled, liquefied petroleum gas-fueled, and methanol-fueled light-duty vehicles and light-duty trucks, and for evaporative emission tests on gasoline-fueled, natural gas-fueled, liquefied petroleum gas-fueled, and methanol-fueled light-duty vehicles and light-duty trucks. Certain items of equipment are not necessary for a particular test, e.g., evaporative enclosure when testing petroleum-fueled diesel vehicles. Alternate equipment, procedures, and calculation methods may be used if shown to yield equivalent or superior results, and if approved in advance by the Administrator. Equipment required and specifications are as follows:

(1) *Evaporative emission tests, gasoline-fueled vehicles.* The evaporative emission test is closely related to and connected with the exhaust emission test. All vehicles tested for evaporative emissions must undergo testing according to the test sequences described in §86.130–96; however, the Administrator may omit measurement of exhaust emissions to test for evaporative emissions. The Administrator may truncate a test after any valid emission measurement without affecting the validity of the test. Further, unless the evaporative emission test is waived by the Administrator under §86.090–26 or §86.1810, as applicable, all vehicles must undergo both tests. (Petroleum-fueled diesel vehicles are excluded from the evaporative emission standard.) Section 86.107 specifies the necessary equipment.

(2) *Exhaust emission tests.* All vehicles subject to this subpart are subject to testing for both gaseous and particulate exhaust emissions using the CVS concept (see §86.109), except where exemptions or waivers are expressly provided in subpart A of this part. Vehicles subject to the ''Tier 0'' (i.e., phase-out) standards described under subpart A of this part are exempted from testing for methane emissions. Otto-cycle vehicles subject to the ''Tier 0'' standards are waived from testing for particulates. For vehicles waived from the requirement for measuring particulate emissions, use of a dilution tunnel is not required (see §86.109). The CVS must be connected to the dilution tunnel if particulate emission sampling is required (see §86.110). Petroleum- and methanol-fueled diesel-cycle vehicle testing requires that a PDP-CVS or CFV-CVS with heat exchanger be used. (This equipment may be used with methanol-fueled Otto-cycle vehicles; however, particulates need not be measured for vehicles that are waived from the requirement). All vehicles equipped with evaporative canisters are preconditioned by loading the canisters with hydrocarbon vapors. Petroleum-fueled diesel vehicles are excluded from this requirement.

(3) *Fuel, analytical gas, and driving schedule specifications.* Fuel specifications for exhaust and evaporative emissions testing and for mileage accumulation are specified in §86.113. Analytical gases are specified in §86.114. The EPA Urban Dynamometer Driving Schedule (UDDS) for use in exhaust emissions tests is specified in §86.115 and appendix I of this part.

(b) [Reserved]

[58 FR 16026, Mar. 24, 1993, as amended at 59 FR 48504, Sept. 21, 1994; 60 FR 43888, Aug. 23, 1995; 64 FR 23921, May 4, 1999]

§ 86.107–96 Sampling and analytical systems; evaporative emissions.

(a) *Testing enclosures*—(1) *Diurnal emission test.* The enclosure shall be readily sealable, rectangular in shape, with space for personnel access to all sides of the vehicle. When sealed, the enclosure shall be gas tight in accordance with §86.117–96. Interior surfaces must be impermeable and nonreactive to hydrocarbons (and to methanol, if the enclosure is used for methanol-fueled vehicles). The temperature conditioning system shall be capable of